WHÁT IS CLAIMED IS:

- 1. A method for making a golf ball, comprising:
- step 1: placing an illumination member on a rack which has legs extending radially therefrom;
- step 2: installing the rack with the illumination member in a lower mold which has recesses for receiving the legs of the rack;
 - step 3: mounting an upper mold onto the lower mold and pouring thermo-setting or thermo-plastic transfucent resin in a space between the upper mold and the lower mold to form a core which encloses the illumination member therein;
- step 4: enclosing the core by a mediate layer, and

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- step 5: enclosing the mediate layer by an outer layer which includes dimples.
- 2. The method as claimed in claim 1, wherein the core formed in step 3 includes extensions which the legs of the frame are received.
- 3. The method as claimed in claim 2, wherein the extensions are removed before the core is enclosed by the mediate layer.
- 4. The method as claimed in claim 1, wherein the resin for the core is solidified under the temperature less than 80 degrees Celsius and the pressure less than 3 kg/cm.
- 5. The method as claimed in claim 1, wherein the resin for the core bears a temperature higher than 220 degrees Celsius and the pressure higher than 120 kg/cm.
 - 6. A golf ball comprising:

a core having an illumination member received therein and being adapted to light up by impacts, a mediate layer enclosing the core and an outer layer enclosing the mediate layer.

7. The golf ball as claimed in claim 6, wherein the core includes extensions
extending from an outer periphery thereof and enclosed in the mediate layer.